BEFORE THE
Federal Communications Commission
WASHINGTON, DC 20554

In the Matter of Paging Network, Inc. and Arch Communications Group, Inc. for Transfers of Control of Their Radio Licenses	))))))	WT Docket No. 99-365

APPLICATIONS FOR TRANSFER OF CONTROL

PAGING NETWORK, INC.

Judith St. Ledger-Roty
Paul D. Madison
Joe Price
Michael Francesconi

KELLEY DRYE & WARREN LLP
1200 19th Street, N.W.
Washington, D.C. 20036

Its Attorneys

David P. Gamble
Executive Vice President,
External Affairs

PAGING NETWORK, INC
14911 Quorum Drive
SUITE 600
Dallas, TX 75240

ARCH COMMUNICATIONS GROUP, INC.

Kathryn A. Zachem
Kenneth D. Patrich
J. Wade Lindsay
Carolyn W. Groves

WILKINSON BARKER KNAUER, L L P
2300 N Street, N.W., Suite 700
Washington, D.C. 20037-1128

Its Attorneys

Patricia A. Gray, Esq.
Executive Vice President and
General Counsel

Paul H. Kuzia
Executive Vice President,
Technology and Regulatory Affairs

ARCH COMMUNICATIONS GROUP, INC.
1800 West Park Drive
Suite 250
Westborough, MA 01581

Date: December 13, 1999

TABLE OF CONTENTS

Page

I. OVERVIEW . . . 1

II. THE TRANSACTION . . . 2
- A. Parties to the Application . . . 2
- B. Description of Transaction . . . 3
  - 1. Corporate Structure . . . 3
  - 2. Terms of the Merger . . . 4
- C. Authorizations to be Transferred . . . 6
- D. Qualifications of the Transferee . . . 7
- E. Additional Authorizations . . . 8
- F. Related Government Filings . . . 10
  - 1. State Approvals to the Transfer . . . 10
  - 2. Hart-Scott-Rodino Review . . . 10
  - 3. Bankruptcy Court Approval . . . 10

III. THE MERGER OF AGI AND PAGENET ADVANCES THE PUBLIC INTEREST AND SHOULD BE EXPEDITIOUSLY GRANTED . . . 11
- A. This Merger, As Mergers Like It, Is Driven By The Need To Compete In The Mobile Wireless Communications Market . . . 11
- B. A Review Of The Merger Under The FCC's Public Interest Analysis Demonstrates That The Proposed Mergers Is In The Public Interest. . . . 14
  - 1. The Relevant Product Market . . . 16
  - 2. The Relevant Geographic Market . . . 22
  - 3. The Relevant Market Participants . . . 22
- C. The Proposed Transaction Will Directly and Significantly Benefit the Public and Advance Important FCC Competition Policies . . . 25
  - 1. The merger will benefit consumers and result in a vigorous competitor in the emerging mobile wireless communications market. . . . 26
  - 2. Consolidation is critical to the future evolution of advanced messaging as a competitive service in the mobile wireless communications services marketplace . . . 29
- D. The Transfer Will Not Produce Any Adverse Competitive Consequences . . . 32
  - 1. The Merger will have no adverse impact on the mobile wireless communications market. . . . 33
  - 2. The Merger will not adversely affect competition among traditional paging carriers. . . . 35

IV. REQUEST FOR WAIVER OF NARROWBAND PCS RULES 38
A. Waiver of the Narrowband PCS Spectrum Aggregation Limit Will Serve the Public Interest. 39
B. Waiver of the Narrowband PCS Spectrum Aggregation Limit is Consistent with Past Commission Practice 46

CONCLUSION 52

Exhibit 1 Organizational Charts for Pre-Merger Paging Network, Inc., Pre-Merger Arch Communications Group, Inc. and Post-Merger Arch Communications Group, Inc.

Exhibit 2 PCS Americas U.S. Paging Operations Marketing Research and Information, *The Market Monitor Report: Insights into Adult Paging Market*, July 1999

Exhibit 3 The Strategis Group, *The State of the U.S. Paging Industry: 1999* (November 1999)

Tab A FCC Form 602, Ownership Disclosure Information

Tab B Paging Network, Inc. Applications for Transfer of Control

Tab 1: FCC Form 603, CD, CF, CN, YD, Paging Network of America, Inc. (ULS)
Tab 2: FCC Form 603, GS, Paging Network of America, Inc. (NON-ULS)
Tab 3: FCC Form 603, YS, Paging Network of America, Inc. (NON-ULS)
Tab 4: FCC Form 603, GS, Paging Network of Colorado, Inc. (NON-ULS)
Tab 5: FCC Form 603, YS, Paging Network of Dallas/Ft. Worth, Inc. (NON-ULS)
Tab 6: FCC Form 603, GS, Paging Network of Illinois, Inc. (NON-ULS)
Tab 7: FCC Form 603, YS, Paging Network of Los Angeles, Inc. (NON-ULS)
Tab 8: FCC Form 603, GS, Paging Network of Massachusetts, Inc. (NON-ULS)
Tab 9: FCC Form 603, GS, Paging Network of Michigan, Inc. (NON-ULS)
Tab 10: FCC Form 603, GS, Paging Network of San Francisco, Inc. (NON-ULS)
Tab 11: FCC Form 603, GS, Paging Network of Tennessee, Inc. (NON-ULS)
Tab 12: FCC Form, 603, YS, Paging Network of Tennessee, Inc. (NON-ULS)
Tab 13: FCC Form 603, GS, Paging Network of Washington, Inc. (NON-ULS)

Tab 14: FCC Form 703, XD, Paging Network of Dallas/Ft. Worth, Inc. (NON-ULS)
Tab 15: FCC Form 703, PS, Paging Network of San Francisco, Inc. (NON-ULS)
Tab 16: FCC Form 312, Earth Station, Paging Network of Dallas/Ft. Worth, Inc. (NON-ULS)
Tab 17: FCC Form 312, VSAT, Paging Network of Dallas/Ft. Worth, Inc. (NON-ULS)
Tab 18: FCC Form 312, Earth Station, Paging Network of Los Angeles, Inc. (NON-ULS)

Tab C Arch Communications Group, Inc. Applications for Transfer of Control

Tab 1: FCC Form 603, GS, Arch Communications Enterprises LLC (NON-ULS)
Tab 2: FCC Form 603, IB/IG, Arch Communications Enterprises LLC (NON-ULS)
Tab 3: FCC Form 603, GS, Arch Connecticut Valley, Inc. (NON-ULS)
Tab 4: FCC Form 603, IB/IG, Arch Connecticut Valley, Inc. (NON-ULS)
Tab 5: FCC Form 603, YX, Arch Connecticut Valley, Inc. (NON-ULS)
Tab 6: FCC Form 603, GS, Arch Paging, Inc. (NON-ULS)
Tab 7: FCC Form 603, IB/IG, Arch Paging, Inc. (NON-ULS)
Tab 8: FCC Form 603, GS, MobileMedia License Co. L.L.C. (NON-ULS)
Tab 9: FCC Form 603, IB/IG, MobileMedia License Co. L.L.C. (NON-ULS)
Tab 10: FCC From 603, GS, Nationwide 929.8875 LLC (NON-ULS)
Tab 11: FCC Form 603, CD, CF, CG, OFS, Arch Communications Enterprises LLC (ULS)
Tab 12: FCC Form 603, CD, CF, OFS, Arch Connecticut Valley, Inc. (ULS)
Tab 13: FCC Form 603, CD, CF, OFS, Arch Paging, Inc. (ULS)
Tab 14: FCC Form 603, CD, CF, CG, CN, MobileMedia License Co. L.L.C. (ULS)
Tab 15: FCC Form 703, IB (PMRS), Arch Connecticut Valley, Inc. (NON-ULS)
Tab 16: FCC Form 312, Earth Station, Arch Paging, Inc. (NON-ULS)
Tab 17: FCC Form 312, Earth Station, MobileMedia License Co. L.L.C. (NON-ULS)
Tab 18: FCC Form 312, VSAT, MobileMedia License Co. L.L.C. (NON-ULS)

BEFORE THE
Federal Communications Commission
WASHINGTON, DC 20554

In the Matter of	)	
	)	
Paging Network, Inc. and	)	WT Docket No. 99-365
Arch Communications Group, Inc.	)	
for Transfers of Control of Their Radio	)	
Licenses	)	

To: Wireless Telecommunications Bureau

APPLICATIONS FOR TRANSFER OF CONTROL

I. OVERVIEW

Paging Network, Inc. and all of its subsidiaries (collectively referred to as "PageNet"), and Arch Communications Group, Inc. and all of its subsidiaries (collectively referred to as "AGI") (Pagenet and AGI are sometimes referred to as the "Applicants") hereby seek Commission consent to effectuate a transaction (hereinafter referred to as the "Merger") which, when completed, will result in: (1) the transfer of control of PageNet from its current stockholders to a newly constituted AGI; (2) the transfer of control of AGI from its current stockholders to a new, widely-dispersed group of investors which includes AGI's existing stockholders, certain of its bondholders, PageNet's stockholders and PageNet's bondholders; and (3) the *pro forma* transfer of control and/or assignment of all of PageNet's licenses to a wholly-owned, indirect subsidiary of AGI.

As explained in detail below, the Merger will serve the public interest, convenience and necessity. Indeed, the Merger will benefit consumers and result in a vigorous competitor in the emerging mobile wireless communications markets. Specifically, the Arch/PageNet combination has significant synergies which will facilitate the roll-out of new, innovative services and create profitable opportunities for the company while maintaining an emphasis on traditional paging. The combination will also create significant economic efficiencies which should redound to the benefit of existing and new subscribers. In addition, the combination will result in a financially stronger company. Finally, the Merger will have no adverse affect on competition among either traditional paging carriers or carriers in the emerging mobile wireless telecommunications market.

II. THE TRANSACTION

A. Parties to the Application

PageNet is a paging carrier with approximately 9.3 million units in service as of September 30, 1999. PageNet offers local, regional and nationwide coverage to subscribers in all 50 states, the District of Columbia, the U.S. Virgin Islands and Puerto Rico, including facilities-based service in each of the 100 most populated metropolitan markets in the country. The Company provides numeric (also known as digital display paging), alphanumeric (also known as text messaging), as well as advanced messaging services over both one-way and two-way wireless networks. It also provides content and information services.

AGI is also a provider of paging services, with approximately 7.2 million units in services as of September 30, 1999. AGI offers services in all 50 states, and operates paging facilities in more than 180 of the 200 most populated markets in the country, offering local, regional and nationwide paging services over digital networks that cover approximately 85 percent of the United States population. AGI offers six types of paging services — digital display, alphanumeric display, tone-only, tone-plus-voice, two-way messaging and guaranteed messaging. Arch also offers enhanced complementary services such as stock quotes, news, and other wireless information services including voice mail, personalized greeting and message storage/retrieval.

B. Description of Transaction

1. Corporate Structure

PageNet and AGI have entered into a Merger Agreement by which a newly created, wholly-owned subsidiary of AGI will be merged into Paging Network, Inc. with Paging Network, Inc. emerging as the surviving entity. As consideration for the merger, and as more fully described below, current stockholders and bondholders of PageNet will receive common stock of AGI, and current holders of AGI preferred stock and certain of AGI's bondholders will also receive common stock of AGI.

Contemporaneously with the consummation of the merger, it is anticipated that each of PageNet's indirect subsidiaries which hold FCC licenses will be merged into a single entity, PageNet Holdings, Inc., through a series of internal corporate stock and asset transfers. Also as a result of these internal transactions, PageNet Holdings, Inc. will become a wholly-owned subsidiary of Arch Paging, Inc. (API), an indirect, wholly-owned subsidiary of AGI. To assist the Commission's understanding of this transaction, charts indicating the current corporate structures of AGI, and PageNet and the post-merger structure of AGI are attached hereto as Exhibit 1.

The Applicants therefore seek Commission consent to transfer control of all of PageNet's FCC licenses to AGI, as AGI will be constituted following the Merger (hereinafter, the post-merger AGI will be referred to as the "Combined Company"). In addition, since it is anticipated that more than 50 percent of the equity of the Combined Company will be held by new stockholders as a result of the Merger, the Applicants also seek Commission consent to a transfer of control of AGI's current licenses. Finally, to accommodate the corporate reorganization of PageNet's license holders into the AGI corporate family, the Applicants seek Commission consent to the several *pro forma* transfers of control and/or assignments of license that will take place contemporaneously with the merger to achieve the ultimate, post-merger AGI corporate structure.[1]

2. Terms of the Merger

Under the terms of the Merger, owners of PageNet common stock will receive a 0.1247 fractional share of AGI common stock for each share of PageNet common stock, and stockholders of AGI will retain their shares. When the Merger closes, current holders of PageNet's common stock will own approximately 7.5 percent of the Combined Company's common stock, and current holders of AGI common stock will own approximately 29.6 percent of the Combined Company's common stock.

Under the Merger Agreement, PageNet's bondholders and certain holders of AGI's senior discount notes will be give the opportunity to exchange bonds and notes for

---

1 In light of the complexities associated with the merger of two corporations, each with numerous licensee subsidiaries, the Applicants may need to modify the identity of the ultimate license holder(s). At the time of consummation of the proposed merger, the Applicants will notify the Commission as to the final corporate structure and identity of all licensee entities.

equity in the Combined Company. In the event that the exchange offer to PageNet's debt holders is accepted by the holders of two-thirds, but less than 99.5%, of the debt, PageNet has agreed to proceed with the filing of a pre-packaged plan of reorganization under Chapter 11 of the Bankruptcy Code, which plan is designed to yield approximately the same result as if all of PageNet's bondholders had exchanged their bonds for stock. As a result of these exchanges and/or the pre-packaged plan of reorganization, upon consummation of the Merger, PageNet bondholders approximately 44.5 percent of the Combined Company's common stock. As a result of the exchange offer to holders of AGI Senior Discount Notes, these note holders will own approximately 17.2 percent of the Combined Company's common stock (assuming all such notes are tendered). As a result of the conversion of AGI's Series C Convertible Stock, current holders of Series C Convertible Preferred Stock will own approximately 1.2 percent of the Combined Company's common stock.

Under all of these scenarios, AGI's current equity holders will own less than 50% of the Combined Company upon consummation of the Merger. This will result in a *de jure* transfer of control of AGI's licenses, requiring prior FCC approval.

The Merger Agreement contemplates that AGI's Board of Directors will be expanded to include twelve directors. Upon the effective date of the Merger, at least six of the directors of the Combined Company will be nominated by the current Board of Directors of AGI. Three of the other six directors will be nominated by the Board of Directors of PageNet. Each of the three holders of PageNet Notes holding the greatest percentage in the aggregate principal amount of the PageNet Notes will have the right to nominate one of the remaining three directors; however, if any of these three Noteholders does not exercise its right to nominate a director, then such director shall instead be nominated by the current Board of Directors of AGI. All of these directors will serve until they are replaced or removed by the stockholders of the Combined Company.

AGI's current chairman and chief executive, C. Edward Baker, Jr., will serve as the Chief Executive Officer; PageNet's current chairman and chief executive, John P. Frazee, Jr., will serve as the Executive Chairman of the Combined Company; AGI's current president and Chief Operating Officer, Lyndon R. Daniels, will serve as the President and Chief Operating Officer; and AGI's Current Executive Vice President and Chief Financial Officer , J. Roy Pottle, will serve as Chief Financial Officer.

C. Authorizations to be Transferred

The applications for transfer of control of PageNet's and AGI's radio licenses include numerous Title III authorizations. Copies of the transfer applications related to PageNet's authorizations are attached hereto at Tab B; copies of the transfer applications related to AGI's authorizations are attached hereto at Tab C.

The PageNet authorizations subject to the instant request for transfer of control are for the following services:

Part 5 Experimental
Part 22 Paging and Radiotelephone
Part 24 Narrowband PCS[2]
Part 25 Fixed Satellite Earth Station

---

[2] The networks associated with PageNet's narrowband PCS authorizations are currently under construction. PageNet will submit the construction benchmark notifications required by Section 24.103(f) of the Commission's rules in a timely fashion.

Part 25 VSAT
Part 90 Special Emergency
Part 90 Private Carrier Paging
Part 90 900 MHz SMR (auction)
Part 90 900 MHz SMR (non-auction)
Part 101 Common Carrier Point-to-Point Microwave

The AGI authorizations subject to the instant request for transfer of control are for the following services:

Part 22 Paging and Radiotelephone
Part 22 Air-to-Ground
Part 24 Narrowband PCS[3]
Part 25 Earth Station
Part 25 VSAT
Part 90 PMRS Business Radio
Part 90 CMRS Business Radio
Part 90 Private Carrier Paging
Part 90 900 MHz SMR (non-auction)
Part 101 Common Carrier Point-to-Point Microwave
Part 101 Private Operational Fixed Microwave

D. Qualifications of the Transferee

Once the Merger occurs, the reconstituted Combined Company will continue to be well qualified to exercise ultimate authority over the various types of Title III licenses

---

3 The networks associated with AGI's narrowband PCS authorizations are currently under construction. Pursuant to Section 24.103(f) of the Commission's rules, AGI timely submitted a five year benchmark notification for its Station KNKV205 authorization on September 29, 1999; AGI will continue to submit the construction benchmark notifications required by Section 24.103(f) in a timely fashion.

Separately, AGI, through its wholly-owned subsidiary Benbow Investments, Inc., holds a non-controlling, minority interests in Benbow PCS Ventures, Inc., licensee of regional narrowband PCS stations KNKV235, KNKV241, KNKV217, KNKV223 and KNKV229. Given the non-controlling nature of AGI's interest in Benbow, the instant transaction will not result in a transfer of control of these licenses and, accordingly, no Commission authority to transfer control of these licenses is being requested herein.

held by its subsidiaries. As detailed in the FCC Form 602 attached hereto at Tab A, the Combined Company will continue to satisfy the necessary citizenship and character qualifications to be an FCC licensee. As the owner of numerous CMRS systems licensed by the Commission, AGI's technical and operational expertise in the telecommunications industry is a matter of public record. The proposed transaction will allow AGI to bring these considerable qualifications to bear, enhanced by the expertise of PageNet's senior leadership and employees who remain with the Combined Company, with respect to PageNet's CMRS offerings. AGI is also financially qualified to acquire control of PageNet and has adequate resources to undertake and consummate the Merger, consistent with its other obligations.

E. Additional Authorizations

While the applications for approval of the transfer of ultimate control of these authorizations are intended to be complete, the licensees involved in this proposed transaction may have on file, and may file for, additional authorizations for new or modified facilities which may be granted during the pendency of the transfer of control applications. Accordingly, the Applicants request that the grant of the transfer of control applications include authority for the Combined Company to acquire control of:

(1) any authorization issued to AGI or PageNet or their subsidiaries during the pendency of the Commission's consideration of the transfer of control applications or during the period required for consummation of the transfer following approval;

(2) construction permits held by such licensees that mature into licenses after closing and that may have been omitted from the transfer of control applications; and

(3) applications that will have been filed by such licensees and that are pending at the time of consummation of the proposed transfer.

Such action would be consistent with prior decisions of the Commission.[4]

In addition, pursuant to Sections 22.123(a), 24.423(c), 90.131(a) and 101.29(c)(4) of the Commission's Rules, the Applicants request a blanket exemption from any applicable cut-off rules in cases where AGI, PageNet, or their subsidiaries file amendments to pending Part 22, Part 24, Part 90, Part 101 or other applications to reflect the consummation of the proposed transfer of control. The exemption is requested so that amendments to pending applications reporting the change in ownership will not be treated as major amendments requiring a second public notice period. The overarching scope of the transaction between AGI and PageNet demonstrates that any ownership changes that result with respect to any particular pending application are part of a larger merger undertaken for a legitimate business purpose. Grant of an exemption from the cut-off rules would be consistent with previous Commission decisions routinely granting a blanket exemption in cases involving large transactions.[5]

---

4 *See Applications of PacifiCorp Holdings, Inc. and Century Telephone Enterprises, Inc.*, Memorandum Opinion & Order, 13 FCC Rcd 8891, 8915-16 (1997) ("*PacifiCorp Holdings*"); *Applications of Pacific Telesis Group and SBC Communications, Inc.*, Memorandum Opinion and Order, 12 FCC Rcd 2624, 2665 (1997); *Applications of Craig O. McCaw and American Telephone and Telegraph Co.*, Memorandum Opinion and Order, 9 FCC Rcd 5836, 5909 n.300 (1994) ("*Craig O. McCaw*").

5 *See, e.g.,PacifiCorp Holdings,* 13 FCC Rcd at 8915; *Craig O. McCaw,* 9 FCC Rcd at 5909 n.300 (1994); *Applications of Centel Corporation and Sprint Corporation,* Memorandum Opinion and Order, 8 FCC Rcd 1829, 1833 (1993).

F. Related Government Filings

1. State Approvals to the Transfer

PageNet and AGI are seeking the requisite transfer approvals from and/or are filing the requisite transfer notifications with the necessary state authorities.

2. Hart-Scott-Rodino Review

Pursuant to the Hart-Scott-Rodino ("HSR") Antitrust Improvement Act of 1976, HSR filings have been made with the U.S. Department of Justice and the Federal Trade Commission.

3. Bankruptcy Court Approval

As noted above, the Merger Agreement contemplates a tender offer to the holders of PageNet and AGI publicly traded notes, by which such holders will be able to exchange their notes for equity in the Combined Company. If those tender offers do not produce the minimum level of acceptance set forth in the Merger Agreement within a time period established by the effective date of the tender offer, PageNet has agreed to proceed with the filing of a pre-packaged plan of reorganization under Chapter 11 of the Bankruptcy Code, which plan is designed to yield approximately the same result as if all of PageNet's bondholders had exchanged their bonds for stock.

III. THE MERGER OF AGI AND PAGENET ADVANCES THE PUBLIC INTEREST AND SHOULD BE EXPEDITIOUSLY GRANTED

A. This Merger, As Mergers Like It, Is Driven By The Need To Compete In The Mobile Wireless Communications Market

The importance of the merger between AGI and PageNet, both to the companies themselves and to the subscribers they serve, cannot be overstated. This merger is occurring in the context of pervasive change in the mobile wireless communications marketplace, and amid the removal of both technological and regulatory barriers to substitutability among mobile wireless communications services. As set forth below, the previously more discrete market segments, paging and two-way voice, have evolved into one overarching market — that of mobile wireless communications services.

In order to successfully compete in this market, it is critical that carriers like AGI and PageNet have the breadth of assets, technology, marketing and managerial skills necessary to position themselves in this market. They must have the ability to continue to offer traditional paging services, as well as to offer these customers new, sophisticated mobile wireless communications services; they must also have the assets, technology, marketing and managerial skills to aggressively compete against their formidable competitors such as MCIWorldCom/SkyTel/Sprint PCS, Bell Atlantic/Vodafone AirTouch/GTE, SBC/PacBell/Ameritech, AT&T/AT&T Wireless, BellSouth/BellSouth Data and Nextel (supported by Craig McCaw and his related holdings). These huge entities have enormous financial, spectrum and marketing capabilities, and thus have significantly greater resources than even the Combined Company will have. As evidenced by the proposed merger, both AGI and PageNet believe that the Combined Company entity will be better able to respond to these challenges.

The first mobile frequencies over which paging services could be provided to the public were allocated in 1949. The first services offered were, in hindsight, rudimentary, consisting only of a beep which would alert subscribers that someone was attempting to reach them.[6] Numeric display pagers provided a real technological breakthrough in the early 1980s. These pagers displayed the telephone number entered by the calling party on a small liquid crystal display screen, giving the subscriber the ability to call back to a landline telephone. In essence, the paging device, coupled with the availability of pay telephones and other landline communications, gave people away from their office or home the ability to engage in two-way communications for the first time on a broad scale.

Concomitantly with these technological breakthroughs and additional spectrum allocated by the FCC in 1982,[7] the market for paging services attracted new, well-financed entrants. PageNet was among the new entrants, beginning operations in 1982. Alphanumeric display paging, using the same liquid crystal display technology, followed in the late 1980s, offering the capability of text messaging — the forerunner of e-mail — to mobile subscribers. The prices for paging services in the mid-1980s reflected the

---

6 For a long time, rudimentary voice paging also existed.

7 *Amendment of Parts 2, 22 and 90 of the Commission's Rules to Allocate Spectrum in the 928-941 MHz Band, and to Establish Other Rules, Policies and Procedures for One-Way Paging Stations in the Domestic Public Land Mobile Radio Services and the Private Land Mobile Radio Services*, Second Report and Order, 91 F.C.C. 2d 1214 (1982). Since then, the FCC has permitted paging to be offered over numerous other frequency allocations, among them, cellular, PCS, SMR, 220 MHz, FM subcarrier channels, to name a few.

comparatively new nature of the services being offered; numeric services cost in excess of $20.00 per month.

The advent of cellular telephone service in the mid-1980s, which offered two-way, duplex, voice services, was predicted by some industry analysts to sound the death knell for paging. Cellular services, however, were many times more expensive than available paging services, and were hampered in attracting subscribers away from paging by the initial tether to the automobile (hence the name "car phone"), the bulkiness of the phone, its limited battery life, and lack of robustness in terms of coverage.

Paging not only survived in this environment, but prospered because cellular phones and pagers were often complementary products. Cellular subscribers would also subscribe to a pager; these subscribers would provide their paging telephone numbers for people to call, and then return the call or respond to the message by placing a return call over the cellular phone, allowing subscribers both to receive a page and place the return call. Even as cellular services became more portable, and battery life improved, the prices for these services remained high, reflecting the duopoly nature of the market, and the lack of fully substitutable products.

The introduction of broadband personal communications services ("PCS"), along with the technological advances that occurred since cellular systems were built initially, rapidly eroded the previously marked segmentation of the mobile wireless communications marketplace discussed above. This resulted from the (i) introduction of new handsets and infrastructure which merged the paging technology and the mobile voice technology; and (ii) aggressive price competition, driving down both cellular and

PCS rates precipitously. Broadband carriers are now offering not only voice services combined with short messaging (a synonym for numeric and alphanumeric services), but also in many cases are offering the short messaging component for little or no additional charge.[8]

Consummation of the proposed merger is a critical step in AGI's and PageNet's ongoing efforts to adapt to and to successfully compete in this new competitive reality. As discussed below, the merger of PageNet and AGI will create a stronger, more economically efficient company with complementary strengths. In addition, the Merger will give customers greater access to an expanded range of mobile wireless products and services, along with greater ubiquity of coverage and reliability with the consolidation of the two companies' networks. All of these benefits will redound to the benefit of subscribers or potential subscribers of the Combined Company, and will better position the Combined Company to compete more effectively and create new products and services for its customers. PageNet and AGI therefore urge the Commission to grant the instant applications expeditiously.

B. A Review Of The Merger Under The FCC's Public Interest Analysis Demonstrates That The Proposed Mergers Is In The Public Interest.

In accordance with its obligations under Section 310(d) of the Act, the Commission must determine whether grant of the proposed transfer of control will serve

---

[8] Andrew Seybold's *OUTLOOK*, June 30, 1999, at 6-8.

the public interest, convenience and necessity.[9] Beginning with its review of the merger of Bell Atlantic and NYNEX, the Commission has articulated a multi-step inquiry for its public interest analysis of proposed mergers or acquisitions of telecommunications carriers.[10] In addition to considering the "merger-specific" efficiencies such as cost reductions, productivity enhancements, improved incentives for innovation, and the advancement of FCC policy goals, the Commission's analysis also includes a framework for assessing the competitive impact of the merger on the relevant telecommunications market.

Under this competitive analysis, the Commission first defines the relevant product and geographic markets. Second, the Commission identifies significant current and potential participants in each relevant market, especially those likely to play a substantial competitive role. Third, the Commission evaluates the horizontal effects that the proposal may have on competition in the relevant markets. Ultimately, the Commission will weigh any competing harmful and beneficial effects to determine whether, on balance, the proposal is likely to enhance competition in the markets in question or otherwise serve the public interest.

---

9 47 U.S.C. § 310(d) (1994).

10 *Applications of NYNEX Corporation and Bell Atlantic Corporation*, Memorandum Opinion and Order, 12 FCC Rcd 19985, 20008-14 (1997) ("*Bell Atlantic/NYNEX Order*"); *Application of Motorola, Inc. and American Mobile Satellite Corporation for Consent to Transfer Control of Ardis Company*, Memorandum Opinion and Order, 13 FCC Rcd 5182, 5189-92 (1998) ("*Motorola, Inc.*"); *PacifiCorp Holdings*, 13 FCC Rcd at 8898-8902.

PageNet and AGI submit that an extensive *Bell Atlantic/NYNEX* analysis is unnecessary here because it can be easily demonstrated that the proposed merger does not raise competitive concerns. Nevertheless, to facilitate and expedite the Commission's consideration of the applications, the parties are providing an analysis of the proposed transaction under the *Bell Atlantic/NYNEX* framework.

1. The Relevant Product Market

In defining the relevant product market, the Commission focuses on products or services offered by the parties and evaluates the extent to which service offered by other communications companies compete for business conducted by those entities.[11] A product market is typically defined as a "service or group of services for which there are no close demand substitutes."[12] A product market is not comprised of perfectly substitutable products, but is a "group of goods or services whose availability and price discipline one another."[13]

---

[11] *Pittencrieff Communications, Inc.*, Memorandum Opinion and Order, 13 FCC Rcd 8935 (1997) ("*Pittencrieff*").

[12] *Bell Atlantic/NYNEX Order*, 12 FCC Rcd at 20014. "Demand substitutability identifies all of the products or services that consumers view as substitutes for each other, in response to changes in price. For example, if, in response to a price increase for orange juice, consumers instead purchase apple juice, the apple juice would be considered a demand substitute for orange juice." *Regulatory Treatment of LEC Provision of Interexchange Services and Originating in the LEC's Local Exchange Area and Policy and Rules Concerning the Interstate, Interexchange Marketplace; Leaco Rural Telephone Cooperative, Inc. Petition for Waiver*, 1999 FCC LEXIS 3040, *63 ¶ 39 (rel. June 30, 1999).

[13] *Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, Fifth Annual Report, 13 FCC Rcd 24284, 24490 (1998)(Furchtgott-Roth, C. dissenting), citing Crandall & Furchtgott-Roth, *Cable*

(continued...)

Relevant product markets are not static, but may change over time.

> For example, as competition increases and more telecommunications carriers enter each other's markets, carriers are increasingly bundling packages of telecommunications services. As more carriers offer bundles of services, consumer expectations and perceptions of relevant markets may change. To the extent that large numbers of consumers come to expect and demand bundled product offerings, and carriers supply such offerings, the bundled product offerings may well become a separate relevant product market. Moreover, within a particular relevant product market, it may also be appropriate to identify and separately aggregate groups of consumers with distinguishable demand patterns.[14]

Changing product markets is precisely the circumstance facing PageNet and AGI today. As discussed above, advantages in technology introduced by broadband carriers forever altered the landscape for mobile services, both paging and cellular, rapidly eroding the previous segmentation of the mobile wireless communications market. A number of industry reports confirm this phenomenon. A recent market report by Motorola demonstrates that among the top three reasons paging customers gave for discontinuing their use of a pager was that they bought a cell phone.[15] Another study, by

---

(...continued)
TV: Regulation or Competition at 26.

14 *Motorola, Inc.*, 13 FCC Rcd at 5192-93 (1998).

15 The top three reasons for discontinuing use of a pager were: "Change in Business situation" (23%); "Bought a cell phone" (18%); and "Didn't need it" (17%). PCS Americas U.S. Paging Operations Marketing Research and Information, *The Market Monitor Report: Insights to the Adult Paging Market*, July 1999, at 33 ("Market Monitor Report"). Appended hereto as Exhibit 2. Further, the 18% number may be low because the "change in business situation" and "Didn't need it" categories could certainly include companies or individuals that discontinued (continued...)

the Strategis Group, concludes that almost one-fifth of potential turnover customers are considering replacing their pagers with mobile phones.[16]

Wall Street, too, has been quick to recognize the competitive threat that PCS, and other mobile wireless communications services pose to traditional numeric and alphanumeric paging. For example, a July 28, 1999 report published by Morgan Keegan & Co. states:

> We believe investor concern about the future outlook for the paging industry was compounded by the launch of broadband PCS ("bPCS") services using digital technology . . . in the second half of 1996. The launch of bPCS services, which is primarily in competition with existing cellular services, was promoted as having a capability to offer multiple services, such as voice, paging and two-way messaging, off the same handset. Initial pricing of bPCS was aggressive, with several operators offering unlimited service for a low fixed price for a year. . . . We believe this exacerbated investor concern about the outlook for paging carriers. This has continued to the present. . . .[17]

Merrill Lynch Capital Markets concluded that there is "general sluggishness in the traditional paging sector with increased competition from other mobile wireless

---

(...continued)
using pagers in favor of mobile phones.

16 *Id.* at 41, *citing Customer Churn Stirs Up Paging Industry*, News Release, The Strategis Group, Nov. 5, 1998.

17 R.P. Kasargod, *Paging Network*, Morgan Keegan & Co., Company Report, *available in* WL Investext Report No. 2907718, at 5 (July 28, 1999).

alternatives — especially lower cellular and PCS pricing." Merrill Lynch "remain[s] concerned about the continued competition from the cellular and PCS operators . . . ."[18]

Undoubtedly, some users will continue to prefer to use a traditional pager because of a preference for that form, continuing perceptions of coverage and building penetration advantages, and the like. But more and more, the two-way mobile devices are substitutable for, and not just complimentary to, the paging device. People choose among the range of products available to them, including an array of features such as caller-ID, short messaging service, two-way interactive voice, expanded text messaging, and choose the device and price which best meets their needs. Unfortunately, the converse is not true, since paging does not offer the two-way voice features of the more robust mobile services.

In light of the above, Arch and PageNet submit that the relevant product market now consists of mobile wireless communications services, all providing a measure of substitutability and, hence, price discipline to each other. Two-way mobile services are now offered routinely as a package with short messaging services, which are identical to numeric and alphanumeric paging. In addition to traditional paging, PageNet and AGI

---

18 D. Wuh, *et al.*, *Paging Network*, Merrill Lynch Capital Markets *available in* WL Investext Report No. 2858631, at p. 2 (May 12, 1999). Similar concerns are reflected in numerous other reports from financial analysts. C.L. Trabuco, *United States Paging Industry*, Wheat First Union *available in* WL Investext Report No. 2773257, at 1 (Dec. 16, 1998) ("Wheat First Union") ("The industry has experienced strong competition from other wireless operators, including cellular and PCS carriers."); *id.* at 6 ("'Pure-play' paging operators will continue to contend with competition from the messaging divisions of larger telecom entities such as AirTouch and BellSouth, along with the competition fostered by the bundling of short messaging services with cellular and PCS services.").

now provide a variety of advanced messaging services including guaranteed messaging and two-way messaging, mobile wireless information applications (internet access and data transmission), and telemetry (particularly location identification).[19] These services vary as to the type and amount of information that may be conveyed to subscribers and as to whether the subscriber can transmit information in response. At their core, all of these products, which offer subscribers the ability to receive information while on the move, now influence and react to one another generally, and thus are properly identified as being in the "mobile wireless communications" market.

Admittedly, not all of these services are perfectly substitutable (although many are identical). As discussed above, however, a product market is not comprised of perfectly substitutable products, but is a "group of goods or services whose availability and price discipline each other," and these services are in large part substitutable, providing price discipline to one another.[20] Further, technological network improvements, such as locating antennae on individual buildings, have improved digital cellular and broadband

---

19 Mobile wireless information applications encompass a wide array of applications ranging from data transmitted over one-way pagers, to vehicle tracking from satellites, to mobile wireless Internet connections via portable computers or personal digital assistants ("PDAs"). *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*; *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Fourth Report, 14 FCC Rcd 10145, 10195 ("*Fourth CMRS Competition Report*"). With regard to internet access, PageNet and AGI note that the majority of the industry recently reached an agreement on standards for transmitting Internet-based information to pagers. This process results in paging operators offering more services that are identical to services offered by digital cellular, broadband PCS and alternative remote communications devices.

20 *See supra* n. 13.